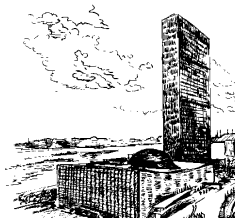
Part 5



Science, Technology, and Research

UN Environment Program (UNEP)

The United Nations Environment Program (UNEP), with headquarters in Nairobi, Kenya, is the principal UN forum for global environmental issues. The United States has been a leading financial and technical contributor since UNEP's creation in 1972. UNEP's responsibilities are to assess the state of the environment, to provide early warning of environmental threats, and to serve as the catalyst of the United Nations in promoting international cooperation and action in response to such threats. Guidance and oversight are given by the Governing Council, which is composed of 58 elected member states, including the United States.

Top priorities of the United States are to promote the financial and institutional health of UNEP and to advance its crucial role in providing environmental information, monitoring, assessment, and early warning of environmental threats. The United States has joined other governments in calling for more active communications between UNEP and its member states and improved coordination with other UN bodies.

UNEP's success in its role as a catalyst has resulted in the successful conclusion of a number of environmental conventions, including the UN Framework Convention on Climate Change; the Vienna Convention and Montreal Protocol on protecting the stratospheric ozone layer; the Basel Convention on Hazardous Waste; the Biodiversity Convention; and the Convention to Combat Desertification. UNEP's Regional Seas Program continues implementation of the 1995 Global Program of Action to address problems posed by land–based sources of marine pollution. UNEP is also coordinating implementation of a Prior Informed Consent agreement on trade in toxic chemicals and is facilitating international negotiations on an agreement to deal with dangers posed by persistent organic pollutants, like DDT.

In recent years, however, UNEP has been dealing with internal reform challenges. Reform efforts began in 1997 when the Governing Council adopted a more focused mandate and created the High–level Committee of Ministers to provide policy guidance and to lead a process of institutional revitalization. The goal of the reform process was to steer UNEP toward

assuming a better and more functionally–based organizational structure with improved management and administrative efficiency and with greater resources directed to program implementation. The reform process accelerated in 1998 when the incoming Executive Director, Klaus Toepfer, chaired a task force on institutional reform. At that time, the United States introduced several proposals on UNEP reform that highlighted the need to strengthen environmental monitoring, assessment, and early warning activities and to increase administrative efficiency.

UNEP's initial reform efforts show promise. The new organizational structure has improved coordination among UNEP divisions, increasing UNEP's ability to develop more effective, cross–cutting program initiatives. In Africa, for example, UNEP is active in helping countries develop capacity in enacting and enforcing environmental laws and in improving fresh water treatment and storage. UNEP has also increased its outreach and liaison to member states. UNEP agreed, for example, to the U.S. request that it open a UNEP office in Washington, D.C., with regional responsibility for the United States and Canada. The office, which will be headed by an American citizen, is expected to open in 2000.

At the 20th meeting of the Governing Council in February 1999, governments reaffirmed UNEP's crucial role in providing environmental assessment and early warning. At that meeting, the United States underscored its support for UNEP's efforts, in particular the Global Resource Information Database, the Global Environmental Monitoring System, and the environmental information retrieval system. Through these facilities and in collaboration with scientific centers worldwide, in 1997 and 1999, UNEP published its Global Environmental Outlook, a comprehensive and integrated assessment of the world environment.

More work remains for UNEP on budgeting and financial management. The Governing Council took up these issues at its 20th meeting, reviewing UN reports that were critical of UNEP's budget documents and procedures. The Governing Council called for greater detail in financial reporting to allow governments to make more informed decisions on funding needs. The United States hopes to see significant improvement in UNEP's budget accounting in 2000.

Protection of World Climate

UN Framework Convention on Climate Change (FCCC)

The United Nations Framework Convention on Climate Change (FCCC) entered into force in March 1994. It unites over 170 nations in the effort to stabilize atmospheric concentrations of greenhouse gases at levels that would prevent dangerous human interference with the climate system. In adding the Kyoto Protocol to the FCCC in December 1997, developed nations, as a whole, agreed to reduce greenhouse gas emissions

by approximately 5.2 percent below 1990 levels during the period 2008–2012.

The United States signed the Kyoto Protocol during the Fourth Conference of Parties (COP–4), the Convention's governing body, which met in Buenos Aires in November 1998. In addition to domestic action, the United States intends to meet its target through the use of international emissions trading, joint implementation among developed countries, and the Clean Development Mechanism (CDM), which involves project activities in developing countries.

The most significant outcome of COP–4 was the Buenos Aires Plan of Action (BAPA). This plan sets forth a two–year process to elaborate rules for the market–based implementation mechanisms noted above, for the underlying compliance regime, for the treatment of carbon sinks, and for other key U.S. climate–change objectives. At COP–5 in November 1999, the Parties made significant progress in advancing the BAPA. The United States reiterated its strongly–held view that these rules must ensure the greatest environmental benefit at least cost and that the compliance regime must be transparent and effective.

Success in mitigating climate change depends on a long–term commitment by all nations, including developing countries and countries with economies in transition. It is encouraging that at COP–5 Argentina announced its proposal for a new type of binding emissions target and Kazakhstan made clear its intention to join the ranks of developed countries and move toward taking on a binding commitment. In general, developing countries have heightened their interest in CDM and the anticipated technology transfer and in improving local clean air quality and energy efficiency.

Intergovernmental Panel on Climate Change (IPCC)

The Intergovernmental Panel on Climate Change (IPCC), established in 1988 as a joint effort of the World Meteorological Organization and the United Nations Environment Program, is the authoritative international scientific and technical assessment body with respect to climate change. The IPCC held its Fifteenth Plenary in Costa Rica in May 1999. At that session, it adopted amendments to its rules and procedures, reviewed the progress of ongoing activities, and discussed issues related to the Third Assessment Report.

In addition to preparing assessment reports, the IPCC also prepares and reviews special reports and develops methodologies requested by the FCCC. Work continues on studies of technology transfer, emission scenarios, land–use and land–use change and forestry issues, and emissions inventories. U.S. scientists chair the IPCC and co–chair its Working Group II, which considers impacts and adaptation.

UN Scientific Committee on the Effects of Atomic Radiation (UNSCEAR)

The U.N. Scientific Committee on the Effects of Atomic Radiation (UNSCEAR) was established by the UN General Assembly in 1955 to provide continuous review and evaluation of the effects of ionizing radiation on humans and their environment. Radiation in this context covers both natural and human–made (i.e. from atmospheric and surface nuclear explosions) environmental radiation, and medical and occupational exposures. The Committee receives, assembles, and compiles reports and information furnished by its member states, members of the United Nations, specialized agencies, the International Atomic Energy Agency, and nongovernmental organizations on observed levels of ionizing radiation and on scientific observations and experiments relevant to the effects of ionizing radiation on people and the environment.

The 48th session of UNSCEAR met April 12–16, 1999, in Vienna. On the basis of documents prepared by the UNSCEAR Secretariat, the Committee reviewed and continued work on the following documents: Natural Radiation Exposures, Exposures from Man–made Sources of Radiation, Medical Radiation Exposures, Occupational Radiation Exposures, Dose Assessment Methodologies, Epidemiological Evaluation of Radiation-Induced Cancer, DNA Repair and Mutagenesis, Hereditary Effects of Radiation, Combined Effects of Radiation and Other Agents, Biological Effects of Low-Level Radiation, and Local Exposures and Effects from the Chernobyl Accident. In a four–year investigation cycle of these matters, 1999 was the third year, with the next major report to be published in 2000.